

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>7343M/VB</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) <b>FOR FURTHER ACTION</b>	
International application No. <b>PCT/US99/27182</b>	International filing date (day/month/year) <b>16/11/1999</b>	Priority date (day/month/year) <b>16/11/1998</b>
International Patent Classification (IPC) or national classification and IPC <b>C11D11/00</b>		
Applicant <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 8 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand <b>18/05/2000</b>	Date of completion of this report <b>01.09.2000</b>
Name and mailing address of the international preliminary examining authority:  <b>European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465</b>	Authorized officer  <b>Irwin, L</b>  Telephone No. <b>+49 89 2399 2527</b> 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/27182

## I. Basis of the report

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

### Description, pages:

1-73 as originally filed

### Claims, No.:

1-16 as originally filed

### Drawings, sheets:

1/4-4/4 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

## III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application.
- ☒ claims Nos. 4.

because:

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☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

**see separate sheet**

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos. .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	13
	No:	Claims	1 - 3, 5 - 12, 14 - 16
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1 - 3, 5 - 16
Industrial applicability (IA)	Yes:	Claims	1 - 3, 5 - 16
	No:	Claims	

**2. Citations and explanations**

**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

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**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

In claims 1 and 2, it states that the ultrasonic cleaning composition has an interfacial tension of from  $10 \text{ mNm}^{-1}$  to  $0.0001 \text{ mNm}^{-1}$  which therefore relates to the interfacial tension of the liquid compositions. However, this does not cover the fact that the composition may be in solid form. In this case, the composition should be dissolved to measure its IFT value. The application does not specify to which extent the composition should be dissolved and under what conditions. Thus, the claims are unclear with respect to solid compositions.

In claim 4, since the size of the container in which the suds cylinder test is measured is not given, the scope of this claim is not clear. Different results would be obtained depending on the dimensions of the cylinder used in this test, and these features need to be disclosed here.

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following documents cited are:

- D1: WO 94 07989 A (UNILEVER) 14 April 1994 (1994-04-14).
- D2: US 5 218 980 A (EVANS DAVID H) 15 June 1993 (1993-06-15)
- D3: CH 676 994 A (SANDOZ AG) 28 March 1991 (1991-03-28)

**Novelty:**

The subject matter of independent claim 1 is not novel since ultrasonic cleaning compositions comprising from 0.001% - 99% by weight of an ultrasonic cleaning agent are disclosed in the prior art documents D1 and D3: (see D1, examples, pages 10 - 12; and D3, description, page 2, lines 20 - 54). Also regarding the information given in claim 2, the

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cleaning solutions described in the prior art, (for example in the examples of D1), contain the components claimed in the application and should consequently have an interfacial tension within the range claimed.

The subject matter of claim 3 is not novel since an ultrasonic cleaning composition has been disclosed in the prior art documents D1 and D3 where ultrasonic cleaning compositions are disclosed that contain combinations of the components included in the list given in claim 3 such as surfactants, hydrotropes, and detergency builders etc. (see D1, description, page 3, lines 19 - 23; page 3, lines 25+; page 5, lines 29 - 34; and examples; and also D3, description, page 2, lines 20 - 54).

The subject matter of claims 5 - 12, and 14 - 16 are also not novel since these features are disclosed in documents D1 and D3 (see D1: description, page 4, lines 1 - 32; page 5, lines 29 - 34; page 5, lines 36 - page 6, line 10; page 6, line 19 - page 7, line 23; claim 9; and examples; also see D3: page 2, lines 20 - 55; example 1, page 4, lines 15 - 30; and example 9, page 5, lines 12 - 14).

The subject matter of claim 13 is novel as these diamine compounds are not disclosed in the prior art documents D1 - D3.

Therefore claim 13 is novel and the claims 1 - 3, 5 - 12, and 14 - 16 are not novel according to Article 33(2) of the PCT.

**Inventive Step:**

Using the 'problem - solution' approach for the determination of an inventive step for the novel dependent claim 13, the technical problem has been formulated as follows: "How to provide an alternative cleaning composition that can be used to clean household items such as dishes and clothes ultrasonically which does not result in an excess of foam being produced in an ultrasonic process".

The closest prior art has been taken to be document D3 since this document is concerned with the ultrasonic cleaning of hard surfaces such as household utensils, hospital

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apparatus, plastic, metal and glass as well as some textiles (see D3, description, page 3, lines 48 - 54 and 61 - 64).

The cited prior art does not suggest the use of the diamine compounds which are, however, known commercially available compounds which have already been used in cleaning compositions. Therefore, it would be obvious for a man skilled in the art to modify the compositions of D3 by adding any new component considered suitable for a cleaning composition. As it stands, no advantageous or unexpected effects have arisen from the addition of the amines and so therefore it is not an inventive feature.

Therefore claim 13 is not inventive according to Article 33(3) of the PCT.

**Re Item VII**

**Certain defects in the international application**

The unpublished documents mentioned on page 29 (lines 15 - 19, and 27 - 28), page 33 (lines 14 - 20), page 61 (lines 13, and 26 - 29), and page 63 (line 26) cannot be used as references to the background art since these documents need to have been made available to the public no later than on the date of publication of the application (PCT/GL/3 II, 4.18 (ii)(b)).

The independent claims 1 is not in the two-part form in accordance with Rule 6.3(b) of the PCT, which in the present case would be appropriate, with those features known in combination with the prior art document D1 being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

The phrase "... herein incorporated by reference" as used in the description on page 3, (lines 12 - 13), page 11, (line 13), page 19, (lines 2, 17, and 20), page 22, (line 17), page 24, (line 24), page 28, (line 13), page 29, (lines 3, 20 and 29), page 33, (lines 19 and 25), page 36, (line 10), page 65, (line 15), page 67, (line 26), and page 68, (line 11) is an expression not to be used (Rule 9.1(iv) of the PCT, Guidelines PCT/GL/3 III, 4.3a).

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**Re Item VIII**

**Certain observations on the international application**

In claim 1, the definition of low foaming is not precise enough. This feature needs to be characterised in more detail, possibly with the use of further measurements.

In claim 16, no additional features for the invention are given. The features covered are what would be expected to occur anyway in aerated water, and do not add to the scope of the invention.



## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

<b>Date of mailing (day/month/year)</b> 24 August 2000 (24.08.00)	<b>Applicant's or agent's file reference</b> 7343M/VB
<b>International application No.</b> PCT/US99/27182	<b>Priority date (day/month/year)</b> 16 November 1998 (16.11.98)
<b>International filing date (day/month/year)</b> 16 November 1999 (16.11.99)	
<b>Applicant</b> BODET, Jean-François et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
18 May 2000 (18.05.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland	<b>Authorized officer</b> Kiwa Mpay
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38